Remarks

Claims 15-30 stand rejected under 35 U.S.C. §103 as being unpatentable over US Patent Application Publication No. 2004/0054965 by Haskell et al. ("Haskell") in view of US Patent No. 6,665,445 to Boon ("Boon"). The Applicants respectfully request reconsideration and withdrawal of the rejection..

The Applicants respectfully submit that Claims 15-30 are patentable over the combination of Haskell and Boon. Independent Claims 15 and 26 are herein amended to replace the word "variable" with "parameter" to further clarify the claimed subject matter. Support for the amendments can be found in paragraph 29 of the originally-filed specification.

Claim 15 is directed to management of "interactions between at least one peripheral command device and at least one multimedia application exploiting the standard MPEG-4 for displaying a scene comprising MPEG-4 objects." The peripheral command device delivers "digital signals of user interactions as a function of actions." A first digital sequence in the form of a BIFS node is constructed. The node includes at least one field defining a type and number of interaction data to be applied to objects of the scene. The node specifies an association between digital signals of user interactions and scene objects. "The at least one field defines at least one action to be applied to the scene with a parameter field, the value of which corresponds to a parameter of said digital signals received from the peripheral command device."

Paragraph 70 of Haskell states that a "local user interaction can occur in the form of behavior programming via use of scripting. This local user interaction through scripting can be used to interact with the BIFS/Java 3D scene description graph interpreter 1020." However, the format of the interaction signals as well as a BIFS node sequence comprising user-interaction data is not indicated by Haskell, as recited in Claim 15. Stating that user interactions interact with the graph interpreter does not specify how the interaction is made, and there is no teaching in Haskell that the output of the interpreter is a BIFS sequence. Moreover, there is no teaching that a BIFS node specifying an association between the user interactions and the scene objects is provided, as recited in Claim 15.

Paragraph 108 and Fig. 2 of Haskell are referenced in the rejection for teaching "said node comprising at least one field defining a type and number of interaction data to be applied to objects of said scene and said nodes specifying an association between said digital signals of user

interactions and the scene objects," as recited in Claim 15. Additionally, paragraph 108 is applied for teaching the following clause of Claim 15: "wherein the at least one filed defines at least one action to be applied to the scene with a parameter field, the value of which corresponds to a variable of said digital signals received from the peripheral command device." However, paragraph 108 of Haskell fails to even mention a BIFS sequence or node and an association between interaction and scene objects. In the exemplary architecture illustrated in Fig. 2, a user interaction enters the system at the compositor and renderer module, and the MPEG-4/BIFS nodes/sequences are processed upstream to the compositor and renderer module. However, there is no disclosure in Haskell that the presentation signal to the display module has the form of a BIFS node/sequence. Further, there is no teaching on how the user interactions are used at the compositor and renderer module. Thus, the presentation signal does not comprise an association between user interactions and objects.

Boon, as acknowledged in the rejection, also does not disclose the above discussed elements of Claim 15.

The Applicants respectfully submit that the above differences set forth with respect to each of Haskell and Boon are such that combining them fails to result in a method that contains each and every claimed aspect of the subject matter recited in Claims 15-30. The Applicants respectfully submit that Claims 15-30 are allowable over Haskell and Boon, considered alone or in combination.

In light of the foregoing, the Applicants respectfully submit that Claims 15-30 are now in condition for allowance, which is respectfully requested.

Respectfully submitted,

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